



14-1225.fm Page 1 Friday, July 2, 1999 9:00 AM

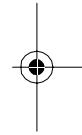
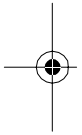


Cat. No. 14-1225  
**OWNER'S MANUAL**

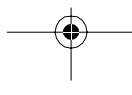
Please read before using this equipment.

**SCP-84**

**Auto-Reverse  
AM<sup>2</sup>FM Stereo  
Cassette Player**



**OPTIMUS<sup>®</sup>**



## FEATURES

Your Optimus SCP-84 Auto-Reverse AM/FM Stereo Cassette Player delivers excellent sound from its built-in radio or your favorite cassette tapes through your speakers or stereo headphones. You can set the time on the cassette player's display, set an alarm to sound, and store up to 20 radio stations in memory. The tuner's PLL (Phase-Locked Loop) circuitry gives you precise tuning and drift-free reception.

Its features include:

**Auto-Reverse Cassette Deck** — lets you continuously play a cassette tape.

**AM/FM Radio with 20-Station Memory** — lets you store up to 20 radio stations (10 FM and 10 AM) in memory so you can quickly tune to your favorite stations.

**LCD with Clock and Alarm** — displays the current time and lets you set the SCP-84 to sound an alarm at the time you select.

**Seek Tuning** — searches forward or backward to the next strong station in the selected band so you can quickly find new stations.

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**E-BASS IN/OUT Switch** — lets you increase bass sounds to suit your listening preferences.

**9 kHz/10kHz Switch** — lets you set the frequency tuning increments between stations for tuning in the United States as well as abroad.

**PHONES Jack** — lets you connect headphones for private listening, or speakers to share the sound with others.

**Three Power Options** — let you power the SCP-84 from internal batteries, standard AC power (with an optional AC adapter), or your vehicle's cigarette-lighter socket (with an optional DC adapter).

**Removable Belt Clip** — lets you attach the SCP-84 to your belt for hands-free carrying when you are on the go.

**Lock Switch** — lets you lock the currently tuned station to prevent accidentally changing it.

**Note:** You need a pair of headphones or amplified speakers (neither supplied), with a  $\frac{1}{8}$ -inch plug, to operate your SCP-84. Your local RadioShack store sells a wide variety of headphones and speakers.

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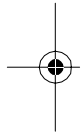


## **PREPARATION**

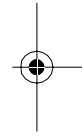
### **ATTACHING THE BELT CLIP**

To attach the belt clip to the SCP-84, press the clip's three latches into the corresponding holes on the back of the SCP-84. Then push the clip upward until it locks into place.

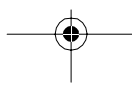
(illus)



To remove the belt clip, press down at the point where the clip attaches to the SCP-84, then slide off the clip.



(illus)



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## POWERING THE SCP-84

You can power your SCP-84 from any of three power sources:

- Internal batteries (not supplied)
- Standard AC power (with an optional AC adapter)
- Your vehicle's cigarette-lighter socket (with an optional DC adapter)

**Note:** Connecting an optional adapter disconnects internal batteries.

### Using Batteries

You can power your SCP-84 from two AA batteries. We recommend alkaline batteries, such as RadioShack Cat. No. 23-557, not supplied. You can also use rechargeable nickel-cadmium batteries (such as Cat. No. 23-125, not supplied). If you use rechargeable batteries, you also need a battery charger (such as Cat. No. 23-133, not supplied).

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**Cautions:**

- Do not mix old and new batteries, different types of batteries (standard, alkaline, and nickel-cadmium), or rechargeable batteries of different capacities in the SCP-84.
- Use only fresh batteries of the required size and type.

Follow these steps to install batteries.

(illus)

1. Press down on the battery compartment cover and slide it in the direction of the arrow to remove it.
2. Install the batteries over the ribbon inside the compartment as indicated by the positive (+) polarity symbols marked inside.
3. Replace the cover.

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### Cautions:

- Never leave dead or weak batteries in the SCP-84.
- If you do not plan to use the SCP-84 for a month or more, or if you plan to use only AC or vehicle battery power, remove the batteries.
- Dispose of batteries promptly and properly; do not bury or burn them.

**Note:** If your SCP-84 locks up, simply remove one of the batteries then reinstall it.

**Important:** Your SCP-84 is capable of using rechargeable nickel-cadmium batteries. At the end of the batteries' useful life, they must be recycled or disposed of properly. Contact your local, county, or state hazardous waste management authorities for information on recycling or disposal programs in your area. Some options that might be available are: municipal curbside collection, drop-off boxes at retailers, recycling collection centers, and mail-back programs.

### Using AC Power

You can power the SCP-84 from a standard AC outlet using an AC adapter (such as Cat. No. 273-1654, not supplied).



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**Cautions:**

- The recommended AC adapter supplies 3 volts and delivers at least 300 milliamps. Its center tip is set to negative, and its plug correctly fits the **DC 3V** jack on the bottom of the SCP-84. Using an adapter that does not meet these specifications could damage the SCP-84 or the adapter.
- Always plug the AC adapter's barrel plug into the SCP-84 before you plug its power module into the AC outlet, and unplug its power module from the AC outlet before you unplug its barrel plug from the SCP-84.

Follow these steps to connect an AC adapter to the SCP-84.

(illus)

1. Set the adapter's voltage switch to 3V.
2. Insert the 3.4 mm outer diameter/1.3 mm inner diameter barrel plug into the AC adapter's socket. Line up TIP on the plug with -NEG on the socket.

3. Insert the barrel plug into the SCP-84's **DC 3V** jack.
4. Plug the AC adapter into a standard AC outlet.

### Using Your Vehicle's Cigarette-Lighter Socket

To power the SCP-84 from your vehicle's cigarette-lighter socket, you need a DC adapter, such as Cat. No. 270-1560.

#### Cautions:

- The recommended DC cigarette-lighter adapter supplies 3 volts and delivers at least 300 milliamps. Its center tip is set to negative, and its plug correctly fits the **DC 3V** jack on the bottom of the SCP-84. Using an adapter that does not meet these specifications could damage the SCP-84 or the adapter.
- Unplug the adapter from your vehicle's cigarette-lighter socket when you turn off the ignition. This prevents your vehicle's battery from being drained if you leave the SCP-84 on when you turn off the ignition.

- 
- Always plug the DC adapter's barrel plug into the SCP-84 before you plug its power module into your vehicle's cigarette-lighter socket, and unplug its power module from your vehicle's cigarette-lighter's socket before you unplug its barrel plug from the SCP-84.

Follow these steps to power the SCP-84 from your vehicle's cigarette-lighter socket.

(illus)

1. Set the adapter's voltage switch to 3V.
2. Insert the 3.4 mm outer diameter/1.3 mm inner diameter barrel plug into the DC adapter's socket. Line up negative (–) on the plug with TIP on the socket.
3. Insert the plug into the SCP-84's **DC 3V** jack.
4. Plug the adapter into the vehicle's cigarette-lighter socket.

**Note:** If the SCP-84 does not operate when you turn it on, remove the DC adapter from your vehicle's cigarette-lighter socket and check the socket for debris. Also, check the fuse in the adapter and your vehicle's fuse block.

## SETTING THE CLOCK

1. Set **RADIO STEREO/MONO/TAPE** to **TAPE**. The display shows the currently set time.

(illus)

2. Press **MODE** twice. The currently set time flashes.

(illus)

12

**Note:** If you do not press ▼ **HR.** or ▲ **MIN.** within 10 seconds, the currently set time stops flashing. If this happens, simply repeat this step.

3. Repeatedly press ▼ **HR.** until the display shows the correct hour. To rapidly advance the hours, press and hold down ▼ **HR.**

(illus)

4. Repeatedly press ▲ **MIN.** until the display shows the correct minute. To rapidly advance the minutes, press and hold down ▲ **MIN.**

(illus)

5. When the display shows the correct time, either press **MODE** or wait until the display stops flashing.

## SETTING THE 9KHZ/10KHZ SWITCH

The **9kHz/10kHz** switch on the back of the cassette compartment door is preset to **10kHz**.

(illus)

In the **10kHz** setting, the SCP-84 tunes frequencies in increments of 10 kHz (AM) and 0.1 MHz (FM), which is standard in the United States.

However, in Europe and some other parts of the world, AM frequencies are broadcast in increments of 9 KHz. If you use the SCP-84 in these countries, use a pointed object, such as a straightened paper clip, to set **9kHz/10kHz** to **9kHz**.

(illus)

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## CONNECTING HEADPHONES OR AMPLIFIED SPEAKERS

To listen to the SCP-84, you need a pair of headphones or amplified speakers with a  $\frac{1}{8}$ -inch plug. Your local RadioShack store carries a wide selection of headphones and amplified speakers.

Insert the headphones' or speakers'  $\frac{1}{8}$ -inch plug into the SCP-84's **PHONES** jack.

(illus)

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## Listening Safely

To protect your hearing, follow these guidelines when you use headphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

## Traffic Safety

Do not wear headphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and can be illegal in some areas.

Even though some headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.



## USING THE RADIO

### LISTENING TO THE RADIO

**Important:** Make sure you have connected headphones or speakers to the SCP-84. See “Connecting Headphones or Amplified Speakers” on Page 15.

1. Set **RADIO STEREO/MONO/TAPE** to **STEREO** for stereo sound on FM stations. **STEREO** appears when you receive an FM broadcast in stereo. Set **RADIO STEREO/MONO/TAPE** to **MONO** for monaural reception.

(illus)

2. Adjust **VOLUME** to a comfortable listening level.

(illus)

3. Press **AM/FM** until the display shows the desired band (AM or FM).

(illus)

4. Tune to the desired station.

**Manual Tuning:** Repeatedly press **TUNING ▲** or **▼** to tune up or down the selected band. To rapidly tune the band, press and hold down **TUNING ▲** or **▼**.

(illus)

**Seek Tuning:** Press and hold down **TUNING ▲** or **▼** for about 1 second. The SCP-84 tunes up or down the selected band, then stops at the next higher or lower station with a strong signal.

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**Notes:**

- The SCP-84 has a built-in AM antenna, and the headphones' or speakers' cord serves as an FM antenna. For the best AM reception, rotate the SCP-84. For the best FM reception, fully uncoil the headphones' or speakers' cord.
  - If FM stereo reception is poor or noisy, set **RADIO STEREO/MONO/TAPE** to **MONO**. The sound is not in stereo, but reception should improve.
5. Set **E-BASS IN/OUT** to **IN** for extra bass effect, or to **OUT** to leave the bass sound unchanged.

(illus)

6. To turn off the radio, set **RADIO STEREO/MONO/TAPE** to **TAPE**.

## STORING RADIO STATIONS IN MEMORY

You can store up to 20 radio stations (10 FM and 10 AM) in memory. Then you can quickly tune to the stored station by pressing a memory button (or **+5** and a memory button).

Follow these steps to store stations in memory.

1. Set **RADIO STEREO/MONO/TAPE** to **STEREO** or **MONO**.
2. Press **AM/FM** until the display shows the desired AM or FM band.
3. Tune to the first station you want to store. The display shows the frequency.
4. Press **STORE**. **M** flashes on the display for about 10 seconds.

(illus)

**Note:** If you do not press a memory location button or **+5** within about 10 seconds, **M** disappears from the display. Start again from Step 4.

5. To store stations into memory locations 1-5, while **M** flashes on the display, press a memory location button (1-5) to store the current frequency in that memory location. **M** stops flashing and the display shows the frequency, then **M** disappears.

(illus)

To store stations into memory locations 6-10, press **+5**, then one of the memory location buttons (1-5). This increases the memory location number by 5. For example, if you press **+5**, then press memory location button **1**, the stereo stores the selected frequency into memory location 6.

(illus)

6. Tune to the next station you want to store, then repeat Steps 4 and 5.

To replace a station you stored, simply store a new station in that memory location.

## USING LOCK

You can lock the radio to prevent either accidentally changing the station you are listening to or replacing a stored station.

To lock or unlock the radio, press and hold down **STOP** while listening to a radio station, then press **MODE**. **LOCK** appears if the radio is locked, and disappears if the radio is unlocked.

**Note:** When you lock the radio, none of the buttons on the front panel work. But, you can still set **VOLUME**, **RADIO STEREO/MONO/TAPE**, and **E-BASS**.

## **USING THE CASSETTE PLAYER**

### **PLAYING A CASSETTE TAPE**

Make sure that you have connected headphones or speakers to the SCP-84. See “Connecting Headphones or Amplified Speakers” on Page 15.

**Caution:** We do not recommend using C-120 cassette tapes. They are very thin and can easily become tangled in the tape-handling parts.

1. Set **RADIO STEREO/MONO/TAPE** to **TAPE**.

(illus)

2. Take up any slack in the cassette tape by turning its hub with your finger or a pencil. If you do not remove excess slack, the tape might become tangled in the play mechanism. Avoid touching the tape.

(illus)

3. Pull open the cassette compartment door.

(illus)

4. Slide the cassette tape into the guides in the cassette compartment door with the tape's open edge facing out, the side you want to hear facing up, and the full reel on the left. Then close the door.

(illus)

5. Press **PLAY** ◀▶ to play the tape.

(illus)



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**Notes:**

- After playing to the end of each side, the tape changes direction to play the other side.
- To manually change the tape's direction to play the other side, slide **◀ DIRECTION ▶** to the opposite position.

(illus)

- To fast-forward or rewind the cassette tape, press **▶▶** or **◀◀**. When you reach the desired section of tape, press **STOP** then **PLAY ◀ ▶** to resume play.

(illus)

6. Adjust **VOLUME** to a comfortable listening level.

7. Set **E-BASS IN/OUT** to **IN** for extra bass effect, or to **OUT** to leave the bass sound unchanged.

(illus)

8. Press **STOP** to stop the tape.

## USING THE ALARM

You can set the SCP-84 to automatically sound a beeping alarm at a time you select.

### SETTING THE ALARM TIME

1. Set **RADIO STEREO/MONO/TAPE** to **TAPE**. The display shows the currently set time.
2. Press **MODE** once. **AL** appears, and the currently set alarm time flashes.

**Note:** If you do not press ▼ **HR.** or ▲ **MIN.** within 10 seconds, **AL** disappears from the display and the currently set alarm time stops flashing. If this happens, simply repeat this step.

3. Repeatedly press ▼ **HR.** until the display shows the correct hour.

(illus)

4. Repeatedly press **▲ MIN.** until the display shows the correct minute.

(illus)

5. When the display shows the correct alarm time, press **MODE** twice or wait until the display stops flashing. **AL** and the set alarm time disappear and the currently set time appears.

## TURNING THE ALARM ON/OFF

To turn on the alarm, press **ALARM ON/OFF** once. **AL** appears on the display. At the preset alarm time, the alarm beeps for about 10 minutes or until you press **ALARM STOP**. The alarm will beep again the next day at the set time.

(illus)

To turn off the alarm so it will not sound again the next day, press **ALARM ON/OFF** once so **AL** disappears from the display.

## CARE AND MAINTENANCE

Your Optimus SCP-84 Auto Reverse AM/FM Stereo Cassette Player is an example of superior design and craftsmanship. The following suggestions will help you care for the SCP-84 so you can enjoy it for years.



Keep the SCP-84 dry. If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode electronic circuits.



Handle the SCP-84 gently and carefully. Dropping it can damage circuit boards and cases, and can cause it to work improperly.



Keep the SCP-84 away from dust and dirt, which can cause premature wear of parts.



Wipe the SCP-84 with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean it.



Use and store the SCP-84 only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.

Modifying or tampering with the SCP-84's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your SCP-84 is not performing as it should, take it to your local RadioShack store for assistance.

## THE FCC WANTS YOU TO KNOW

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly.

To eliminate interference, you can try one or more of the following corrective measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the radio or TV.
- Use outlets on different electrical circuits for the equipment and the radio or TV.

Consult your local RadioShack store if the problem still exists.

## CLEANING THE TAPE-HANDLING PARTS

Dirt, dust, or particles of the tape's coating can accumulate on the tape heads and other parts that the tape touches. This can greatly reduce the performance of the SCP-84. Use the following cleaning procedure after every 20 hours of operation.

1. Remove the batteries and disconnect any other power source.
2. Open the cassette compartment door.
3. Press **PLAY** ◀ ▶ to expose the tape-handling parts.
4. Use a cotton swab dipped in denatured alcohol or tape head cleaning solution to clean the play head, pinch roller, capstan, and tape guides.

(illus)

5. When you finish cleaning, press **STOP** and close the cassette compartment door. Then reconnect power.

Your local RadioShack store carries a full line of cassette player cleaning supplies.

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## RESTORING TAPE TENSION AND SOUND QUALITY

After you play a cassette several times, the tape might become tightly wound on the reels. This can cause play-back sound quality to deteriorate.

To restore the sound quality, fast-forward the tape from the beginning to the end of one side, then completely re-wind it. Then loosen the tape reels by gently tapping each side of the cassette's outer shell on a flat surface.

**Caution:** Be careful not to damage the cassette when tapping it. Do not touch the exposed tape or allow any sharp objects near the cassette.



## SPECIFICATIONS

### RADIO

	FM	AM
Frequency Range	88–108 MHz	530–1710 kHz
IF Rejection	49 dB	50 dB
Image Rejection	15 dB	50 dB
Selectivity	15 dB	22 dB
Signal-to-Noise Ratio	50 dB	29 dB
Stereo Separation	25 dB	N/A
Usable Sensitivity	25 mV	1700 mV/m

### CASSETTE PLAYER

Cassette Mechanism .....	Auto–Reverse
Wow and Flutter.....	0.3%
Signal-to-Noise Ratio.....	51 dB
Separation .....	27 dB
Frequency Response (–3 dB).....	70–5000 Hz

## GENERAL

Power Requirements ..... DC 3V

Power Sources..... 2 AA Batteries (Cat. No. 23-557)  
AC Adapter (Cat. No. 273-1654)  
DC Adapter (Cat. No. 270-1560)

Phone Output Impedance ..... 32 ohm

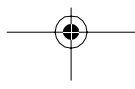
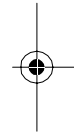
Dimensions (HWD) .....  $4\frac{15}{16}$   $\times$   $3\frac{9}{16}$   $\times$   $1\frac{7}{16}$  in  
(125  $\times$  90  $\times$  36 mm)

Weight ..... 9.0 oz  
(255 gm)

Specifications are typical; individual units might vary.  
Specifications are subject to change and improvement  
without notice.



## NOTES



### RadioShack Limited Warranty

This product is warranted against defects for 90 days from date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your RadioShack sales slip** as proof of purchase date to any RadioShack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

*We Service What We Sell*

10/95

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